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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/578,194	05/24/2000	Marcelo Dornelas	026-1	5443
7590		11/17/2003	EXAMINER	
Dana Rewoldt		ZARA, JANE J		
Garst Seed Company		ART UNIT		
2369 330th Street		PAPER NUMBER		
Slater, IA 50244		1635		

DATE MAILED: 11/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/578,194

Applicant(s)

DORNELAS ET AL.

Examiner

Jane Zara

Art Unit

1635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,7-16 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7-16 and 20-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8-25-03.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office action is in response to the communication filed 8-25-03.

Claims 1, 2, 4, 7-16 and 20-24 are pending in the instant application.

Response to Arguments and Amendments

Any rejections not repeated in this Office action are hereby withdrawn.

The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

The reference to Accession X94938 with regard to Dornelas et al, Plant Molecular biology 39 (1999) 137-147, filed as an amendment on 8-25-03 is noted and has been entered. However, it is suggested that the deleted language "whose content.....fully incorporated herein by reference" be reinserted into the specification (page 5).

Maintained Rejections

Claims 1, 2, 4, 7-16 and 20-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, for the reasons of record set forth in the Office action mailed 4-21-03.

Applicant's arguments and amendments filed 8-25-03 have been fully considered but they are not fully persuasive. Applicants assert that the sequence of ASKdzeta, group II has been provided as SEQ ID NO: 6 (originally referenced as Accession X94938 in the publication Dornelas et al, Plant Molecular biology 39 (1999) 137-147) and this both adequately describes and fully enables the claimed invention. Contrary to Applicant's assertions, the scope of the claims encompasses the broader genus comprising any DNA cosuppression construct comprising any nucleic acid sequence derived from ASKdzeta, group II. Applicants have not adequately described ~~all~~ *the* cosuppression constructs (e.g. sense and antisense) that have specifically targeted and inhibited the expression of SEQ ID NO: 6. Adequate description is perhaps more optimally provided by describing the antisense oligonucleotide(s) that have specifically targeted and inhibited the expression of SEQ ID NO: 6 in the instant disclosure. Inadequate description has been provided, however, for cosuppression constructs other than antisense oligonucleotides targeting SEQ ID NO: 6 (e.g. sense cosuppression constructs, or antisense constructs targeting the broad genus comprising any nucleic acid sequence derived from ASKdzeta, group II, and not limited to SEQ ID NO: 6).

8/27/03

Claims 1, 2, 4, 7-16 and 20-24 are rejected under 35 U.S.C. 112, first paragraph, for lacking enablement over the scope claimed for the reasons of record set forth in the Office action mailed 4-21-03. The invention is enabled for a process for the production of a transgenic plant comprising an increased number of cotyledons comprising the targeting and inhibition of ASKdzeta of group II of SEQ ID NO: 6 by an antisense oligonucleotide that specifically targets and inhibits the expression of SEQ ID No: 6.

Applicant's arguments and amendments filed 8-25-03 have been fully considered but they are not fully persuasive. Applicants assert that the sequence of ASKdzeta, group II has been provided as SEQ ID NO: 6 (originally referenced as Accession X94938 in the publication Dornelas et al, Plant Molecular biology 39 (1999) 137-147) and this both adequately describes and fully enables the claimed invention. Contrary to Applicant's assertions, the scope of the claims encompassed the broader genus comprising any DNA cosuppression construct comprising any nucleic acid sequence derived from ASKdzeta. The claimed invention is therefore not limited in scope to SEQ ID NO: 6. Now is the claimed invention limited to antisense oligonucleotides specifically hybridizing and inhibiting the expression of SEQ ID NO: 6. It would require undue experimentation beyond that taught in the instant disclosure to practice the broadly claimed invention. The specification teaches inhibition of expression of SEQ ID NO: 6 using an antisense (of undisclosed sequence) that specifically targets SEQ ID NO: 6. This teaching is not representative of the ability to increase the number of cotyledons in a transgenic plant comprising the administration of a cosuppression construct derived from any ASKdzeta gene of group II. Therefore the enablement rejection is maintained.


Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Certain papers related to this application may be submitted to Art Unit 1635 by facsimile transmission. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 C.F.R. § 1.6(d)). The official fax telephone numbers for the Group are (703) 308-4242 and (703) 305-3014. NOTE: If Applicant *does* submit a paper by fax, the original signed copy should be retained by applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED so as to avoid the processing of duplicate papers in the Office.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jane Zara** whose telephone number is **(703) 306-5820**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John LeGuyader, can be reached on (703) 308-0447. Any inquiry regarding this application should be directed to the patent analyst, Katrina Turner, whose telephone number is (703) 305-3413. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.



RAM R. SHUKLA, PH.D.
PRIMARY EXAMINER